AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Original) An Optical Scanning system comprising:

a target area;

a light monitor window (LMW);

a black region adjacent to the LMW;

a bulb for illuminating the target area, the LMW and the black region; and

a photodetector having a field of view, the target area being within the field of view between margin areas of the photodetector, the LMW and the black region being within the field of view inside a margin area of the photodetector.

2. (Original) The scanning system of claim 1, wherein the black region is in between the LMW and the target area.

3. (Original) The scanning system of claim 1, further comprising a scan head body; wherein the LMW includes a tab on the scan head body, and wherein the scan head body provides the black region.

4. (Original) The scanning system of claim 1, further comprising a scan head body; wherein the LMW includes a first tab on the scan head body; and wherein the black region is provided by a second tab on the scan head body.

5. (Original) The scanning system of claim 1, further comprising a glass pane; wherein the LMW includes a first strip on the glass pane; and wherein the black region is provided by a second strip on the glass pane.

6. (Original) The scanning system of claim 1, wherein the target area, the LMW and the black region are focused on the photodetector.

7. (Original) The scanning system of claim 1, wherein the bulb is a cold cathode fluorescent bulb.

8. (Original) The scanning system of claim 1, further including a processor for processing the photodetector images of LMW and the black region, the processor using the LMW images to generate at least one feedback signal indicating color channel intensity, the processor using the images of the black region to perform flare correction of at least one feedback signal.

9. (Original) The scanning system of claim 8, wherein further including means for locating the LMW and the black region within the margin area prior to generating a feedback signal.

10. (Original) The scanning system of claim 8, wherein each feedback signal is determined as a function of average pixel intensity in the LMW images and average pixel intensity in the black region images.

11. (Original) The scanning system of claim 8, wherein the feedback signal X of a color channel is determined by

$$X = aV_w - bV_b$$

where V_w is a measured pixel intensity of the images LMW, V_b is a measured pixel intensity of the imaged black region, and a and b are experimentally determined coefficients.

12. (Currently amended) A chip for generating a feedback signal indicating intensity of illumination from a bulb of an optical scanner, the optical scanner including ~~a CCD,~~ an imaging device, a light region of known color and a black region, the chip comprising:

a processor, responsive to an output of the ~~CCD,~~ imaging device, for determining light intensities in images of the light and black regions, wherein the light and black regions are located on a scan head body positioned within the optical scanner;

the processor using the images of the light region to provide at least one feedback signal indicating color channel intensity; and

the processor using the images of the black region to remove flare from at least one feedback signal.

13. (Original) The chip of claim 12, wherein the processor locates the light and black regions prior to generating a feedback signal.

14. (Original) The chip of claim 12, wherein each feedback signal is determined as a function of average pixel intensity in the light region images and average pixel intensity in the black region images.

15. (Original) The chip of claim 12, wherein the feedback signal X of a color channel is determined by

$$X = aV_w - bV_b$$

where V_w is a measured pixel intensity in the light region images, V_b is a measured pixel intensity in the black region images, and a and b are experimentally determined coefficients.

16. (Currently amended) A method of compensating for non-uniform illumination in an optical scanner, the optical scanner including a bulb, a light region of known color, and a black region, the method comprising the steps of:

using the bulb to illuminate the black and light regions; <u>wherein the light and black regions are located on a scan head body positioned within the optical scanner</u>;

generating images of the illuminated light and black regions;

using images of the light region to provide at least one feedback signal indicating color channel intensity; and

using the images of the black region to remove flare from at least one feedback signal.

17. (Original) The method of claim 16, wherein the optical scanner further includes a photodetector; and wherein the images are generated by focusing the target area, the light region and the black region on the photodetector.

18. (Original) The method of claim 16, further comprising the step of locating the light and black regions in the images prior to generating a feedback signal.

19. (Original) The method of claim 16, wherein each feedback signal is determined as a function of average pixel intensity in the light region images and average pixel intensity in the black region images.

20. (Original) The method of claim 16, wherein the feedback signal X of a color channel is determined by

$$X = aV_w - bV_b$$

where V_w is a measured pixel intensity in the light region images, V_b is a measured pixel intensity in the black region images, and a and b are experimentally determined coefficients.

21. (New) The chip of claim 12, wherein the light region includes a LMW tab on a scan head body, and wherein the scan head body provides the black region within the optical scanner.

22. (New) The method of claim 16, wherein the light region includes a LMW tab on a scan head body, and wherein the scan head body provides the black region within the optical scanner.